

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A process for the catalytic hydrodehalogenation of SiCl₄ to form HSiCl₃, which comprises:

bringing a gaseous feed mixture comprising hydrogen and silicon tetrachloride into direct contact with at least one heating element of a resistance heating device, [[with]] wherein the heating element being composed of a metal or metal alloy is made from at least one metal material selected from the group consisting of tungsten, niobium, tantalum, an alloy comprising tungsten, an alloy comprising niobium, and an alloy comprising tantalum; and

heating the gaseous feed mixture by contacting the gaseous feed mixture with the heating element to carry out the reaction; catalytically hydrodehalogenate the silicon tetrachloride with the hydrogen and form a product mixture comprising HSiCl₃; and
performing at least one of the following:

- (a) fractionating or at least partially condensing the product mixture produced by said reaction, or and
- (b) passing the product stream mixture from said reaction the heating as a starting material to a direct further use.

Claim 2 (Currently Amended): The process as claimed in claim 1, wherein said heating element is composed of made from tungsten.

Claim 3 (Currently Amended): The process as claimed in claim 1,

wherein the heating is carried out with at least one heating element ~~which has~~ in the form of at least one selected from the group consisting of a wire, a spiral, a web, a tube, a plate, a mesh [[or]] and a honeycomb body ~~is used~~.

Claim 4 (Currently Amended): The process as claimed in claim 1,
wherein the heating is carried out with a heating element ~~whose having a~~ wire diameter, wall thickness, [[or]] plate thickness or layer thickness [[is]] of from 0.1 mm to 10 mm ~~is used~~.

Claim 5 (Currently Amended): The process as claimed in claim 1,
wherein the heating is carried out with the heating elements of the resistance heating device ~~are~~ operated at a temperature in the range from 300 to 1250°C.

Claim 6 (Currently Amended): The process as claimed in claim 1,
wherein the ~~reaction~~ heating is carried out at a temperature in the range from 600 to 950°C and a pressure of from 0.1 to 100 bar abs.

Claim 7 (Currently Amended): The process as claimed in claim 1,
wherein the ~~reaction~~ heating is carried out at a space velocity of from 2000 to 750,000 750 000 h⁻¹ and the [[gas]] gaseous feed mixture ~~of hydrogen and silicon tetrachloride~~ is contacted with ~~passed over~~ the heating elements of the resistance heating device at a linear velocity of from 0.01 to 10 m/s.

Claim 8 (Currently Amended): The process as claimed in claim 7,

wherein an ~~SiCl₄/H₂ mixture having the feed mixture comprises SiCl₄ and H₂ in a molar ratio of from 1:0.9 to 1:20 is used.~~

Claim 9 (Currently Amended): The process as claimed in claim 7, further comprising:

~~wherein the degree of conversion is set by setting the electric power of the resistance heating device to set a degree of conversion of SiCl₄ to HSiCl₃.~~

Claim 10 (Currently Amended): The process as claimed in claim 1,
wherein the ~~reaction~~ heating is carried out in a flow reactor whose walls or wall insides are ~~composed of~~ made from at least one selected from the group consisting of niobium, tungsten, tantalum, a niobium, tungsten, and/or tantalum-containing alloy, a heat-resistant glass, fused silica, a heat-resistant glaze or and a heat-resistant ceramic.

Claim 11 (Currently Amended): The process as claimed in claim 7,
wherein further comprising:
~~passing~~ the product mixture is passed through at least one heat exchanger located at the beginning of the process in order to vaporize SiCl₄ and/or preheat the H₂/SiCl₄-containing feed mixture.

Claim 12 (Previously Presented): The process as claimed in claim 11,
wherein the product mixture is at least partially condensed, liquid HSiCl₃ is isolated and any hydrogen and silicon tetrachloride obtained are recirculated to the feed stream to the process.

Claim 13 (Currently Amended): The process as claimed in claim 1, wherein said heating element is ~~composed of~~ made from niobium.

Claim 14 (Currently Amended): The process as claimed in claim 1, wherein said heating element is ~~composed of~~ made from tantalum.

Claim 15 (Currently Amended): The process as claimed in claim 1, wherein said heating element is ~~composed of~~ made from an alloy comprising tungsten.

Claim 16 (Currently Amended): The process as claimed in claim 1, wherein said heating element is ~~composed of~~ made from an alloy comprising niobium.

Claim 17 (Currently Amended): The process as claimed in claim 1, wherein said heating element is ~~composed of~~ made from an alloy comprising tantalum.

Claim 18 (Previously Presented): The process as claimed in claim 1, wherein said method includes passing the product stream from said reaction as starting material to a direct further use and said further use is selected from the group consisting of esterification with an alcohol to form alkoxysilanes, hydrosilylation for converting olefins into organochlorosilanes, preparation of monosilane, preparation of solar silicon, and preparation of pyrogenic silica.

Claim 19 (New): The process of claim 1, wherein the gaseous feed mixture is contacted with the heating element and heated at a pressure of from 1 to 10 bar absolute.

Claim 20 (New): The process of claim 1, wherein the gaseous feed mixture is contacted with the heating element and heated at a pressure of from 1.5 to 10 bar.

Claim 21 (New): The process of claim 1, wherein the heating element consists of the metal material.

Claim 22 (New): The process of claim 1, wherein the heating element comprises the metal material.

Claim 23 (New): The process of claim 1, wherein the process comprises heating the feed mixture at a temperature in the range from 600 to 950°C and a pressure of from 0.1 to 100 bar abs, and fractionating or at least partially condensing the product mixture.

DISCUSSION OF THE AMENDMENT

Claims 1-23 are active in the present application. Previously presented Claims 1-18 are amended for matters of form and for clarity. Support for the amendment is found throughout the specification. Claims 19-23 are new claims. Support for the new claims is found on page 4, lines 16-19 and in the original claims.

No new matter is believed to have been added by this amendment.